



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**14.11.2012 Bulletin 2012/46**

(51) Int Cl.:  
**G06Q 10/00 (2012.01) G06Q 50/00 (2012.01)**

(43) Date of publication A2:  
**29.06.2011 Bulletin 2011/26**

(21) Application number: **10193387.7**

(22) Date of filing: **01.12.2010**

(84) Designated Contracting States:  
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR**  
Designated Extension States:  
**BA ME**

(72) Inventors:  
• **Zimmer, Nico**  
**54344, Kenn (DE)**  
• **Brown, Ross, M.**  
**Portland, OR 97221 (US)**

(30) Priority: **01.12.2009 US 628298**

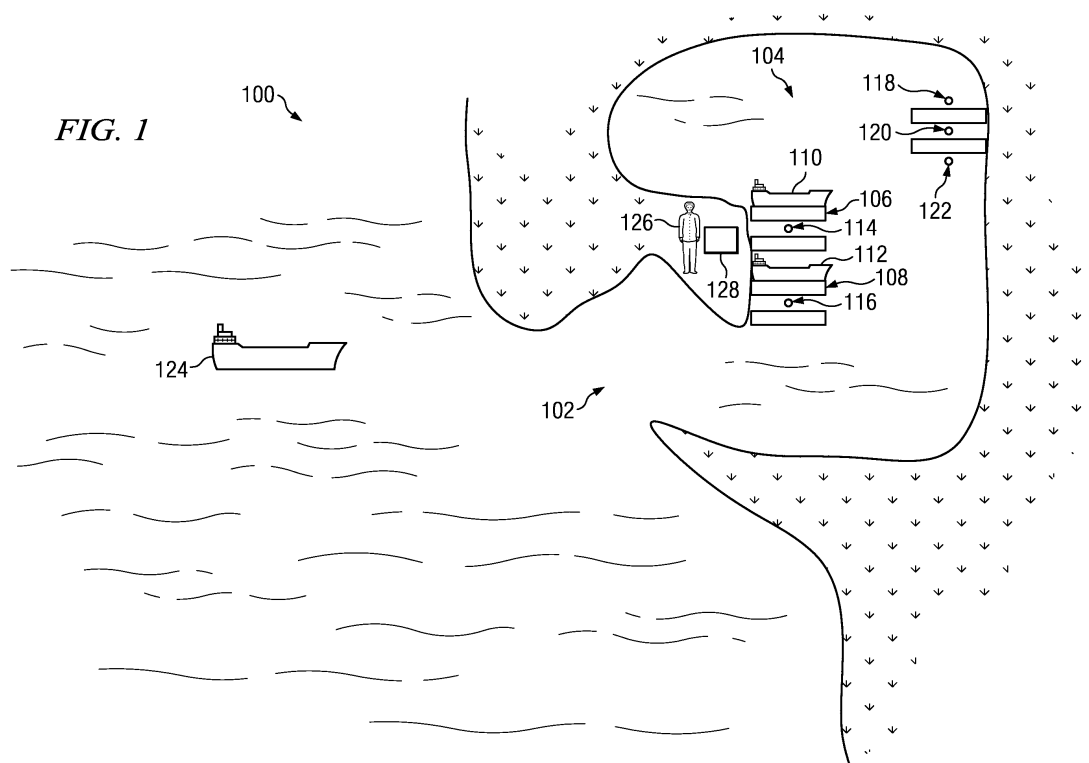
(74) Representative: **Howson, Richard G.B.**  
**Kilburn & Strode LLP**  
**20 Red Lion Street**  
**London WC1R 4PJ (GB)**

(71) Applicant: **The Boeing Company**  
**Chicago, IL 60606-2016 (US)**

(54) **Harbor berth information system**

(57) A method and apparatus for identifying berths for ships. Information about a ship requesting a berth from a plurality of berths in a location is obtained. Current

environmental information for the location is obtained. A number of berths for the ship from the plurality of berths is identified using the information about the ship and the current environmental information for the location.





## EUROPEAN SEARCH REPORT

Application Number  
EP 10 19 3387

| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                           |                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------|
| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Citation of document with indication, where appropriate, of relevant passages                                                                                                                                                                                                                                                                                                                                                                                                                                               | Relevant to claim                                         | CLASSIFICATION OF THE APPLICATION (IPC)        |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | US 2008/147257 A1 (KUHLGATZ KLAUS [DE] ET AL) 19 June 2008 (2008-06-19)<br>* abstract *<br>* paragraphs [0001] - [0016] *<br>-----                                                                                                                                                                                                                                                                                                                                                                                          | 1-15                                                      | INV.<br>G06Q10/00<br>G06Q50/00                 |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | US 2003/191564 A1 (HAUGSE ERIC D [US] ET AL) 9 October 2003 (2003-10-09)<br>* abstract *<br>* paragraphs [0004] - [0016] *<br>-----                                                                                                                                                                                                                                                                                                                                                                                         | 1,14,15                                                   |                                                |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | US 2002/069210 A1 (NAVANI GIRISH [US] ET AL) 6 June 2002 (2002-06-06)<br>* abstract *<br>* paragraphs [0005] - [0008] *<br>* paragraphs [0016] - [0019]; figures 2-3 *<br>-----                                                                                                                                                                                                                                                                                                                                             | 1,14,15                                                   |                                                |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Gerald G. Brown ET AL: "Optimizing Ship Berthing",<br>Naval Research Logistics,<br>1 February 1994 (1994-02-01), pages 1-15,<br>XP55040138,<br>Retrieved from the Internet:<br>URL: <a href="http://onlinelibrary.wiley.com/doi/10.1002/1520-6750%28199402%2941:1%3C1::AID-NAV3220410102%3E3.0.CO;2-L/abstract">http://onlinelibrary.wiley.com/doi/10.1002/1520-6750%28199402%2941:1%3C1::AID-NAV3220410102%3E3.0.CO;2-L/abstract</a><br>[retrieved on 2012-10-05]<br>* abstract *<br>* Chapters I - III *<br>-----<br>-/-- | 8                                                         | TECHNICAL FIELDS<br>SEARCHED (IPC)<br><br>G06Q |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                           |                                                |
| Place of search<br><b>Munich</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Date of completion of the search<br><b>8 October 2012</b> | Examiner<br><b>Dedek, Frédéric</b>             |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>.....<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                           |                                                |

1  
EPO FORM 1503 03.82 (P04C01)



## EUROPEAN SEARCH REPORT

Application Number  
EP 10 19 3387

| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                  |                                  |                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------|
| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Citation of document with indication, where appropriate, of relevant passages                                                                                                                                                                                                    | Relevant to claim                | CLASSIFICATION OF THE APPLICATION (IPC) |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <p>YONGPEI GUAN ET AL: "The berth allocation problem: models and solution methods", OR SPECTRUM, vol. 26, no. 1, 1 January 2004 (2004-01-01), pages 75-92, XP55040129, ISSN: 0171-6468, DOI: 10.1007/s00291-003-0140-8</p> <p>* abstract *</p> <p>* Chapter 1 *</p> <p>-----</p> | 8                                |                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                  |                                  | TECHNICAL FIELDS SEARCHED (IPC)         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                  |                                  |                                         |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                  |                                  |                                         |
| Place of search                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                  | Date of completion of the search | Examiner                                |
| Munich                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                  | 8 October 2012                   | Dedek, Frédéric                         |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone</p> <p>Y : particularly relevant if combined with another document of the same category</p> <p>A : technological background</p> <p>O : non-written disclosure</p> <p>P : intermediate document</p> <p>T : theory or principle underlying the invention</p> <p>E : earlier patent document, but published on, or after the filing date</p> <p>D : document cited in the application</p> <p>L : document cited for other reasons</p> <p>&amp; : member of the same patent family, corresponding document</p> |                                                                                                                                                                                                                                                                                  |                                  |                                         |

1  
EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 10 19 3387

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

08-10-2012

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|-------------------------------------------|---------------------|----------------------------|---------------------|
| US 2008147257 A1                          | 19-06-2008          | AU 2006221985 A1           | 14-09-2006          |
|                                           |                     | CA 2602034 A1              | 14-09-2006          |
|                                           |                     | CH 699530 B1               | 31-03-2010          |
|                                           |                     | CN 101147164 A             | 19-03-2008          |
|                                           |                     | CR 9370 A                  | 06-11-2008          |
|                                           |                     | EP 1856658 A1              | 21-11-2007          |
|                                           |                     | JP 2008532190 A            | 14-08-2008          |
|                                           |                     | US 2008147257 A1           | 19-06-2008          |
|                                           |                     | WO 2006094949 A1           | 14-09-2006          |
|                                           |                     | ZA 200707554 A             | 30-07-2008          |
| US 2003191564 A1                          | 09-10-2003          | BR 0301659 A               | 24-08-2004          |
|                                           |                     | CA 2422611 A1              | 04-10-2003          |
|                                           |                     | DE 60313698 T2             | 24-01-2008          |
|                                           |                     | EP 1353252 A2              | 15-10-2003          |
|                                           |                     | US 2003191564 A1           | 09-10-2003          |
| US 2002069210 A1                          | 06-06-2002          | EP 1317726 A1              | 11-06-2003          |
|                                           |                     | US 2002049667 A1           | 25-04-2002          |
|                                           |                     | US 2002052769 A1           | 02-05-2002          |
|                                           |                     | US 2002069210 A1           | 06-06-2002          |
|                                           |                     | WO 0221318 A2              | 14-03-2002          |
|                                           |                     | WO 0221400 A2              | 14-03-2002          |
|                                           |                     | WO 0221401 A2              | 14-03-2002          |